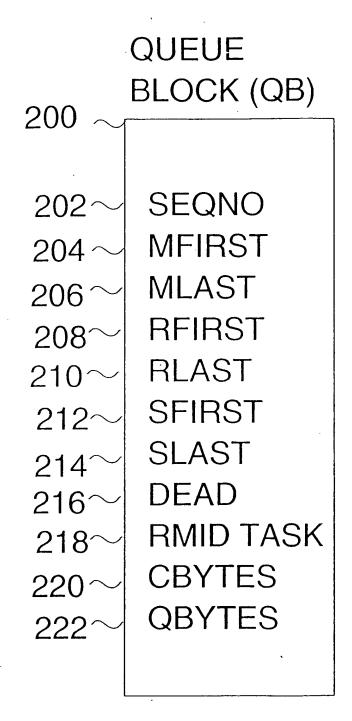


Fig 1



**MESSAGE QUEUE** 300 BLOCK (MSQB) Q-ID 301 **NEXT** 302 **DEADNEXT** 304 STATE 310 S.PLO 312~ S.TASKTERM 314 316 S.EIDRM S.SIGNAL 318 S.E2BIG 320 S.PAIRED 322 S.GOTDS 324 **ANCHOR** 326 **USECNTFLG** 328 **PAIR** 330 **MSGPTR** 332 **TOBEFREED** 334

Fig 3

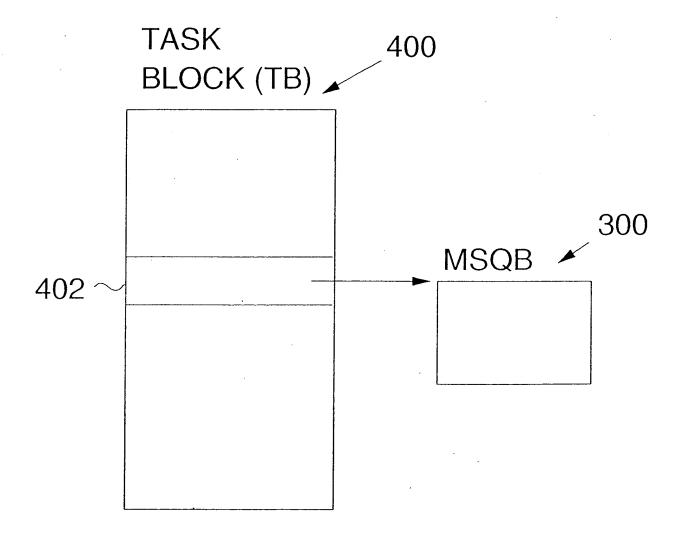


Fig 4

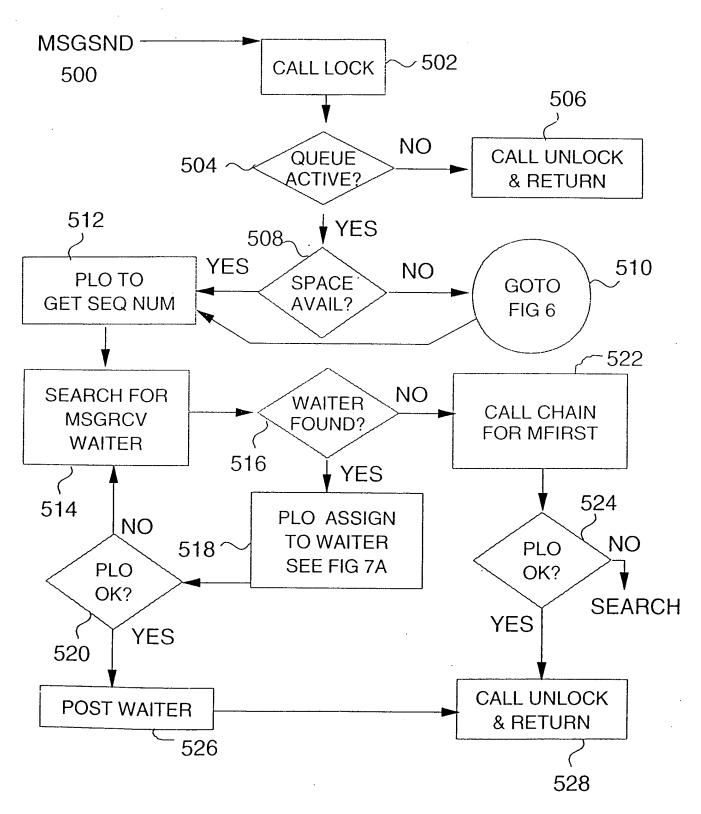


Fig 5

# MSGSND NO SPACE AVAILABLE

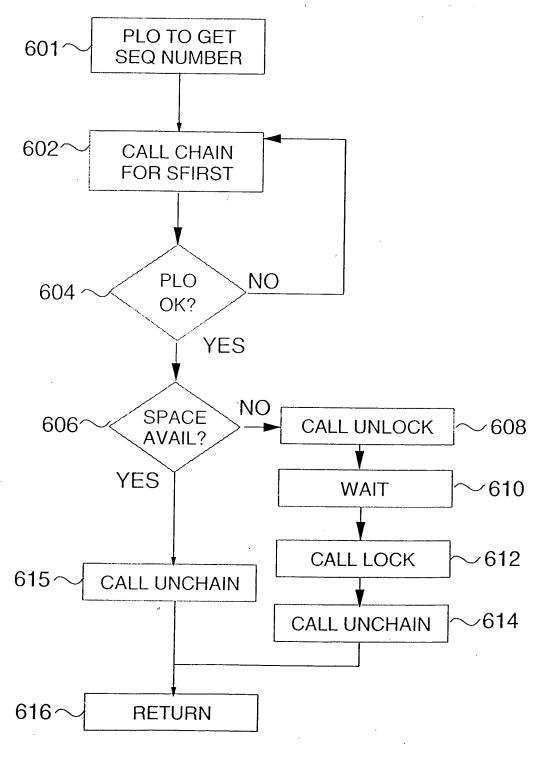


Fig 6

## PLO ASSIGN MESSAGE TO WAITER - BEFORE

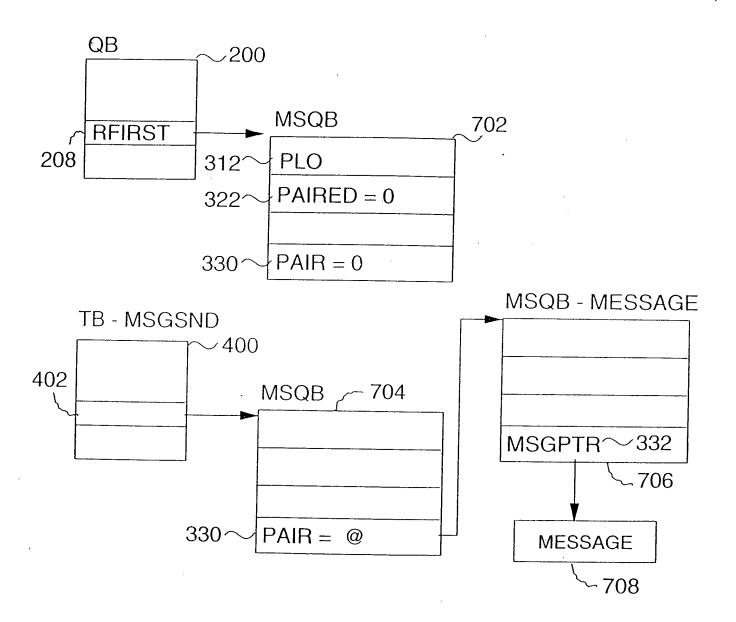


Fig 7

#### PLO ASSIGN MESSAGE TO WAITER - AFTER

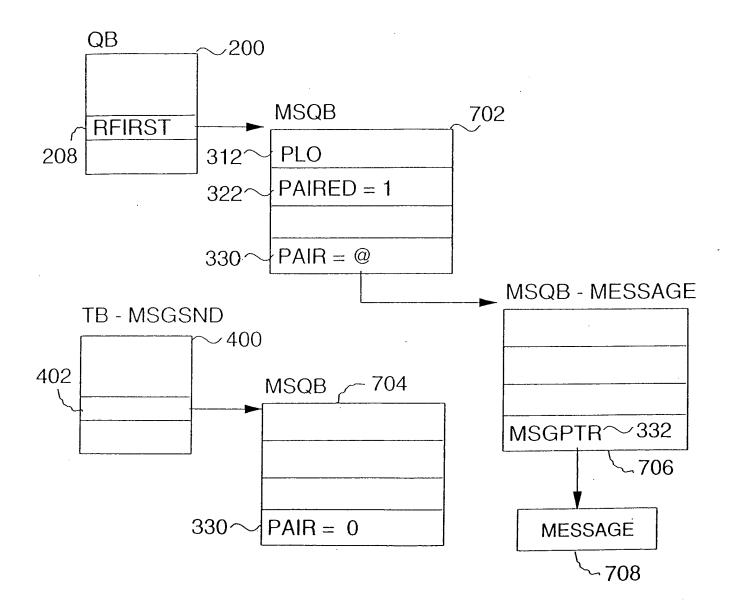


Fig 8

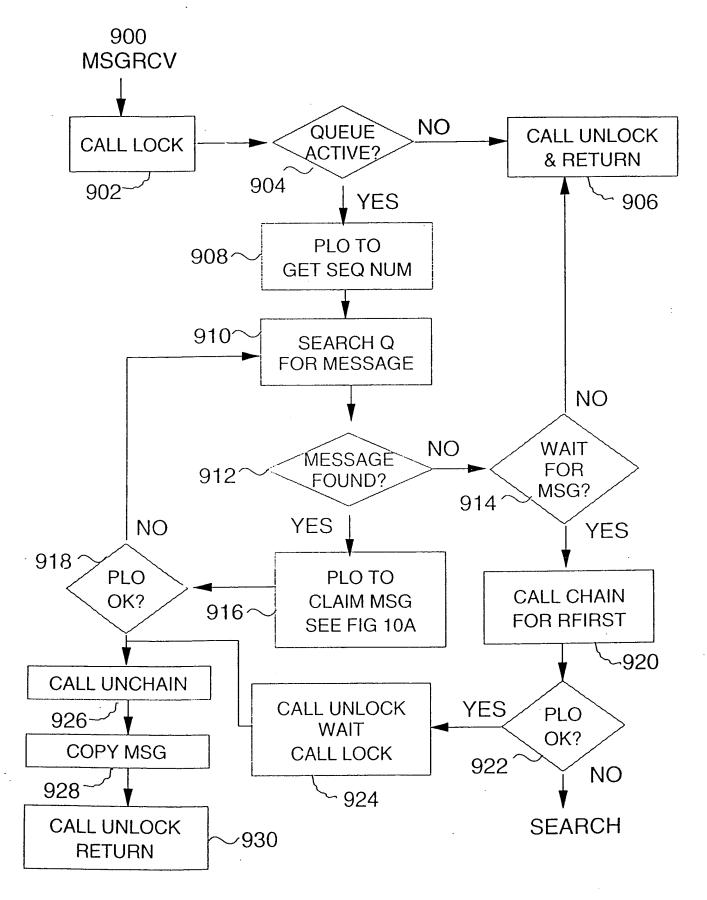


Fig 9

## PLO TO ASSIGN MESSAGE TO CALLER - BEFORE

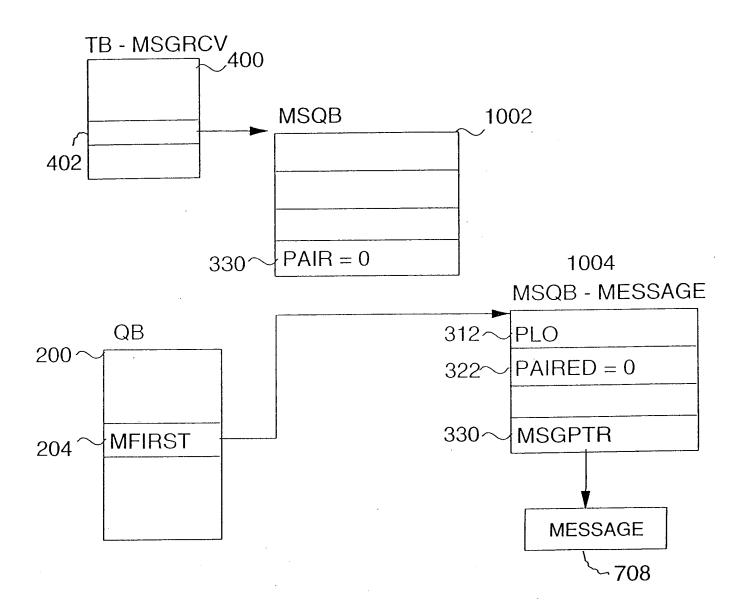


Fig 10A

## PLO TO ASSIGN MESSAGE TO CALLER - AFTER

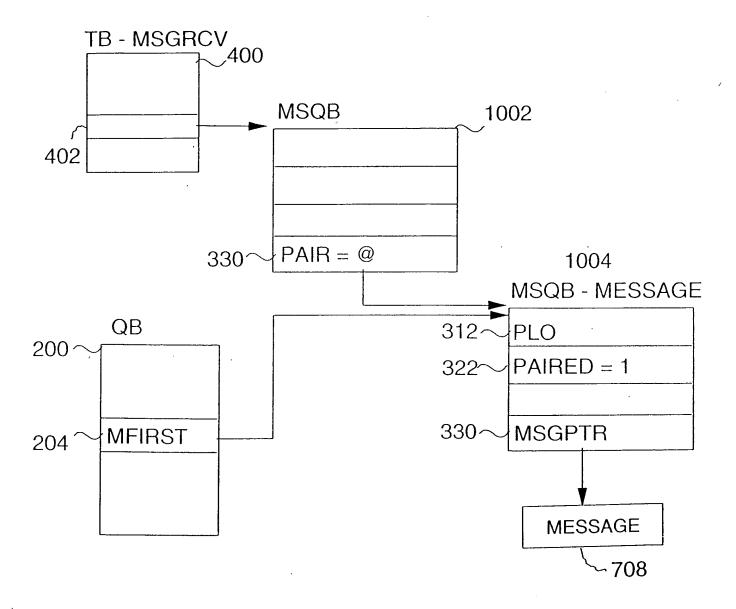


Fig 10B

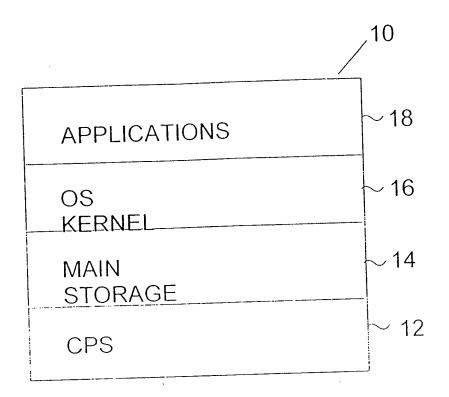


Fig 11

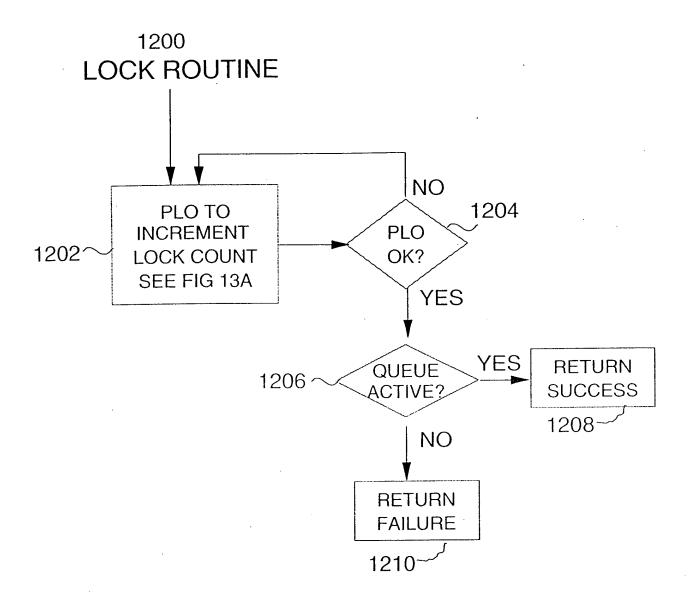
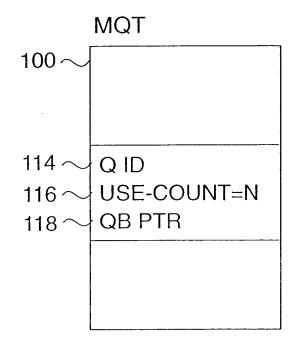


Fig 12

#### LOCK PLO STATE - BEFORE



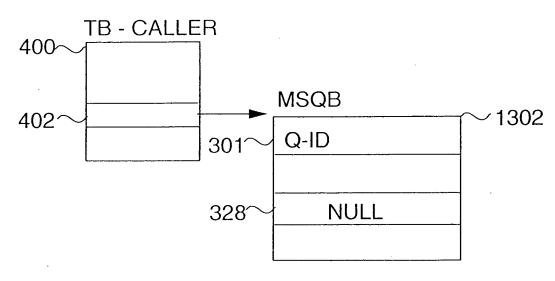
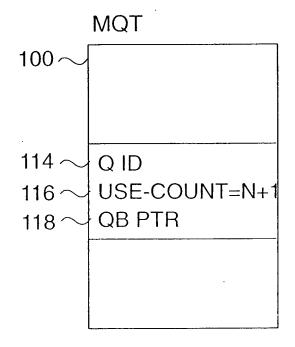


Fig 13A

## LOCK PLO STATE - AFTER



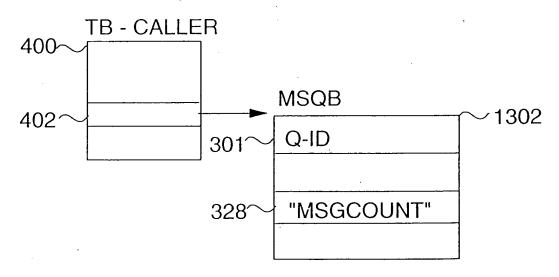


Fig 13B

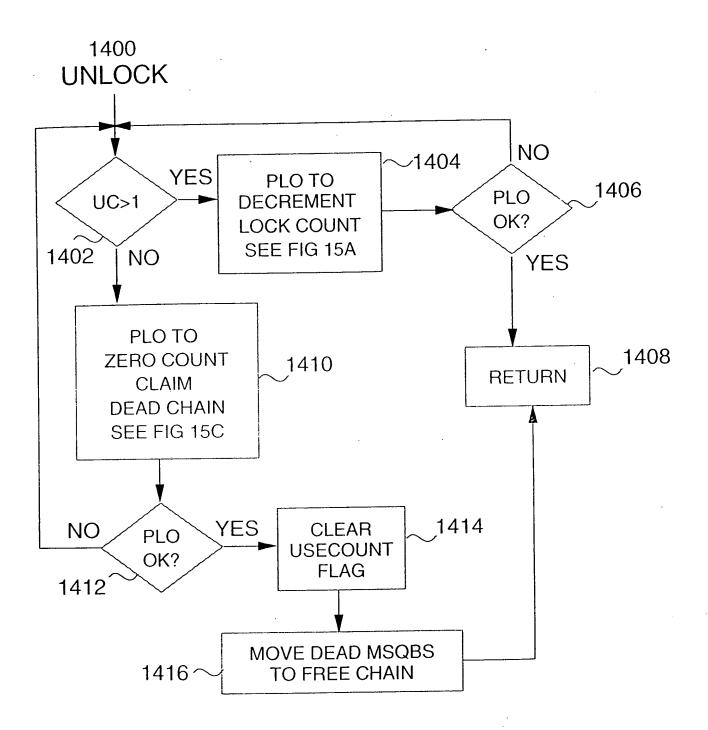
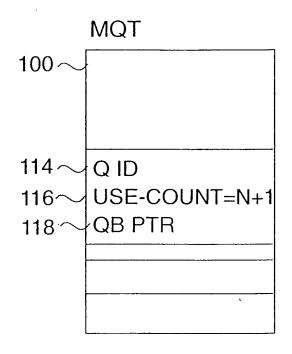


Fig 14

### UNLOCK PLO COUNT > 1 - BEFORE



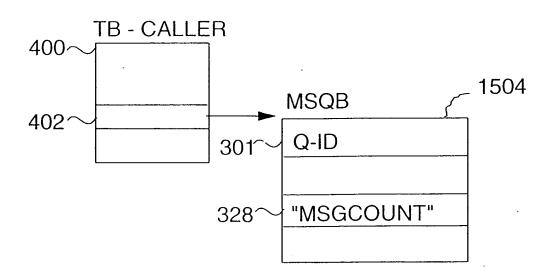
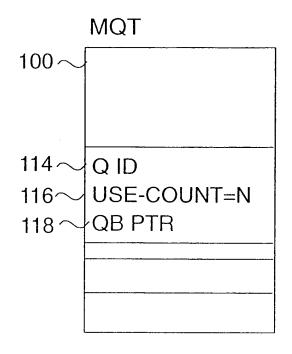


Fig 15A

### UNLOCK PLO CNT > 1 - AFTER



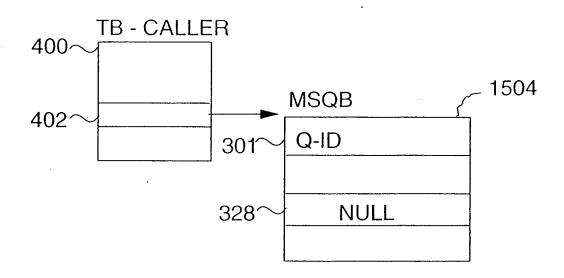


Fig 15B

## UNLOCK PLO COUNT = 1 - BEFORE

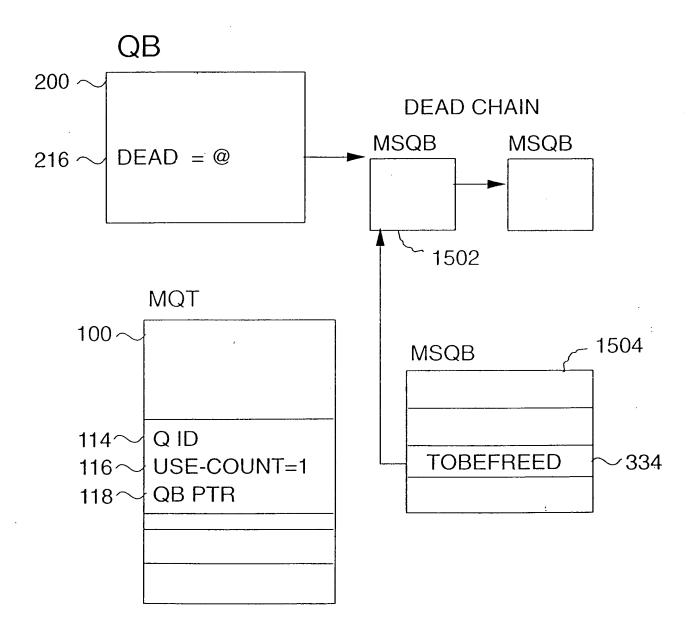


Fig 15C

## UNLOCK PLO COUNT = 1 - AFTER

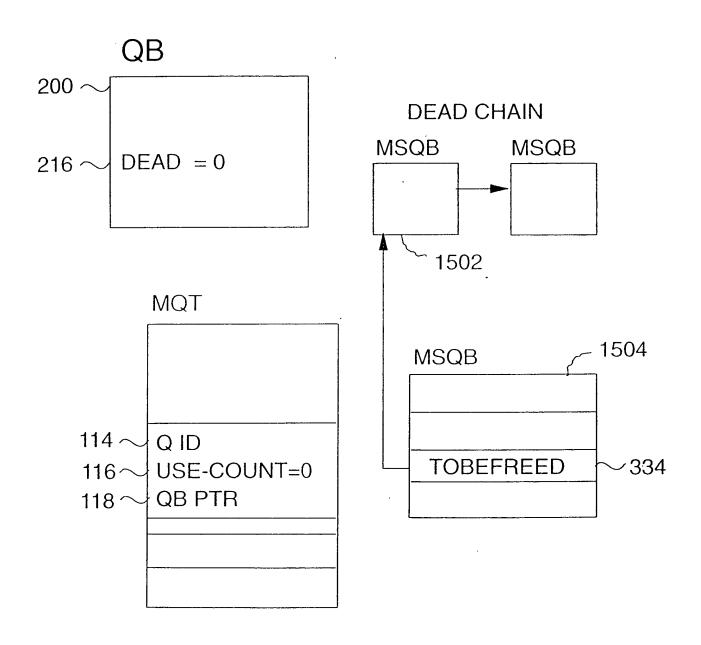


Fig 15D

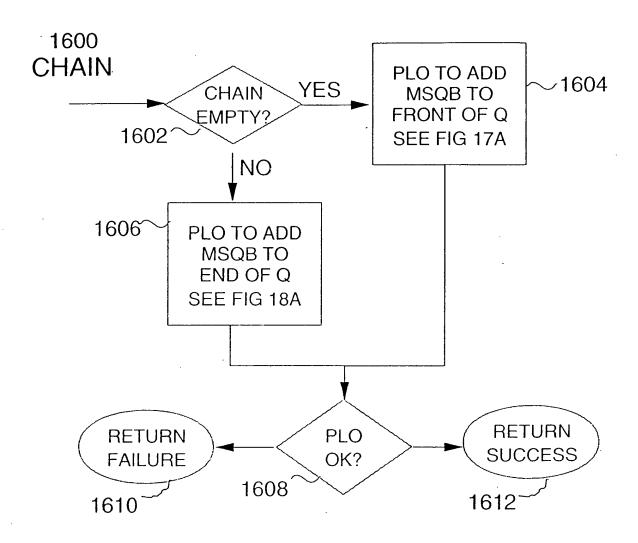
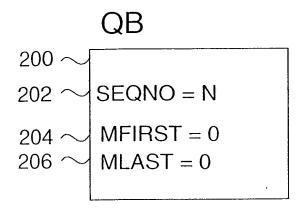


Fig 16

## PLO CHAIN TO FRONT - BEFORE



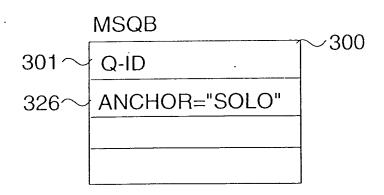


Fig 17A

### PLO CHAIN TO FRONT - AFTER

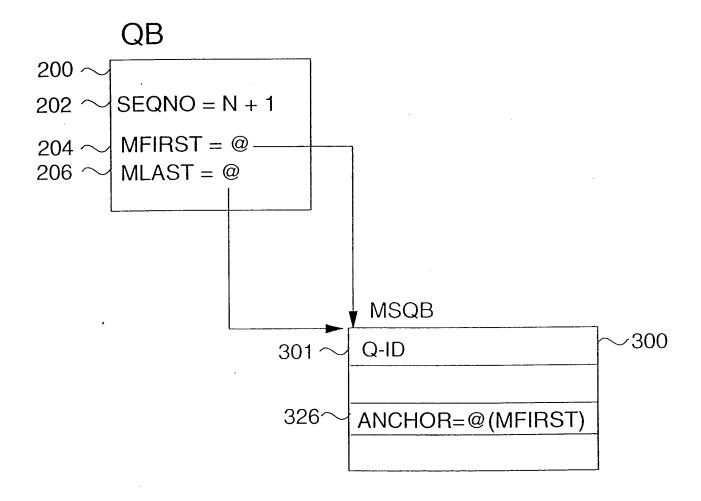


Fig 17B

## PLO CHAIN TO END - BEFORE

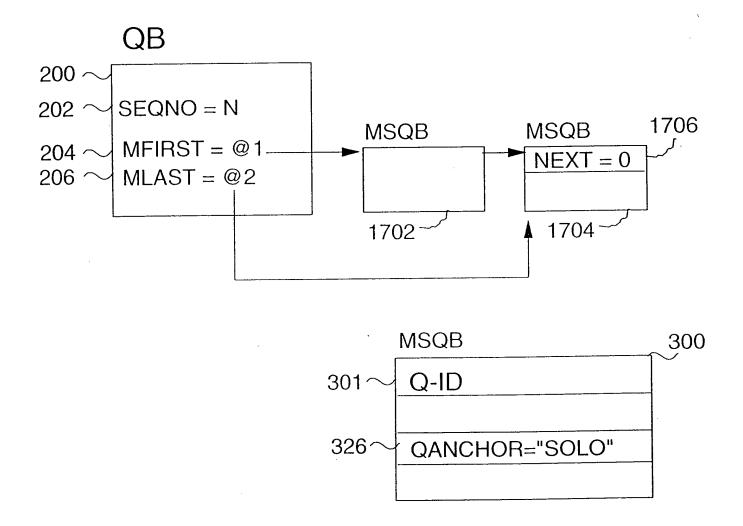


Fig 17C

### PLO CHAIN TO END - AFTER

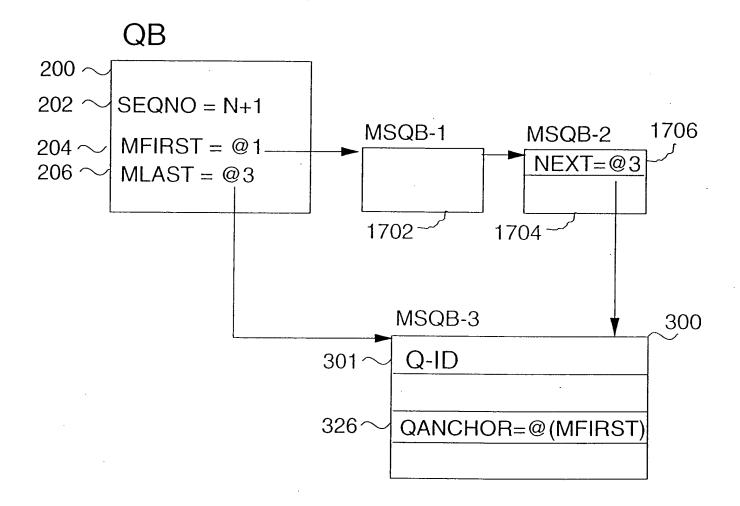


Fig 17D

## PLO UNCHAIN ONLY ELEMENT - BEFORE

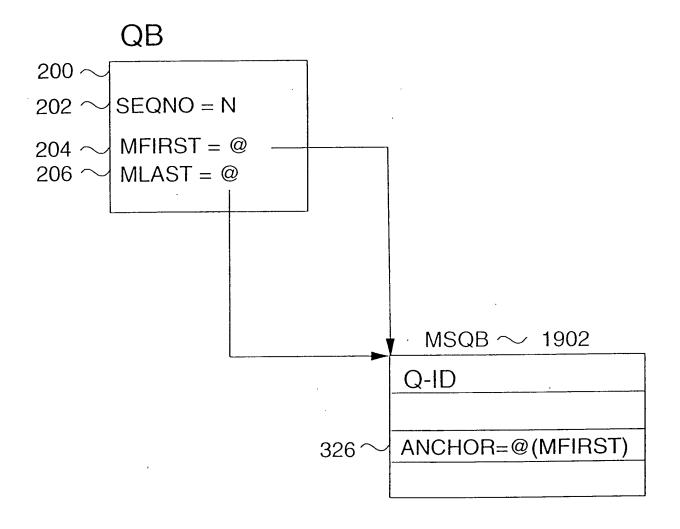
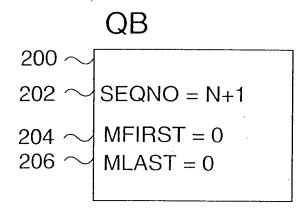


Fig 19A

### PLO UNCHAIN ONLY ELEMENT - AFTER



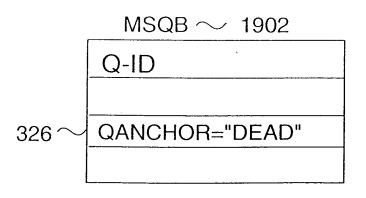


Fig 19B

## PLO UNCHAIN FIRST ELEMENT - BEFORE

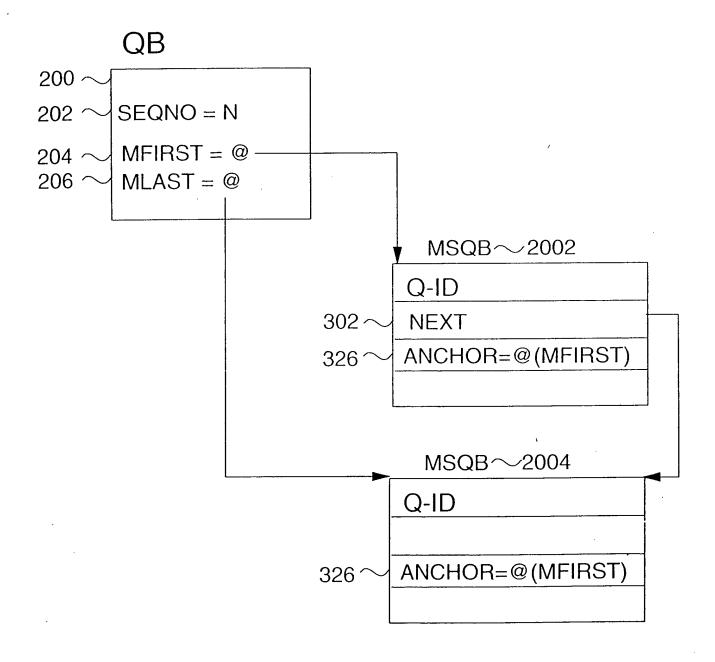


Fig 20A

## PLO UNCHAIN FIRST ELEMENT - AFTER

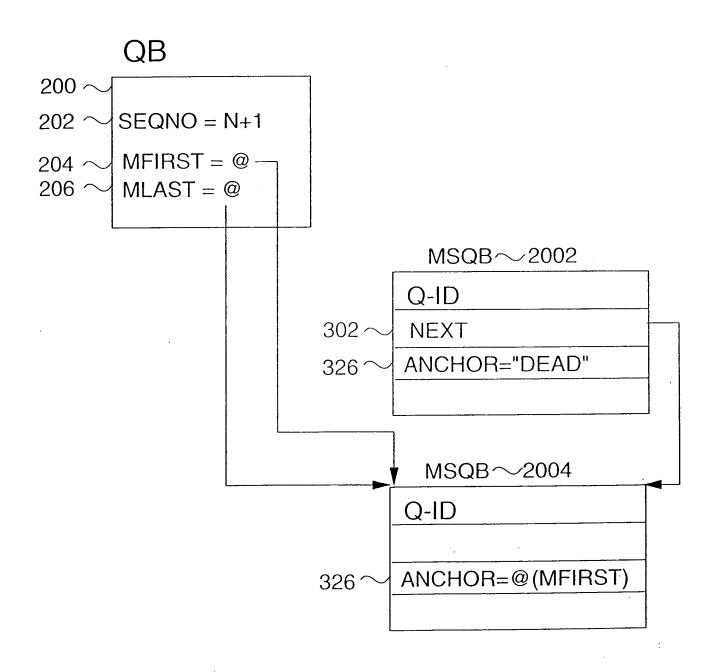


Fig 20B

#### PLO UNCHAIN LAST ELEMENT - BEFORE

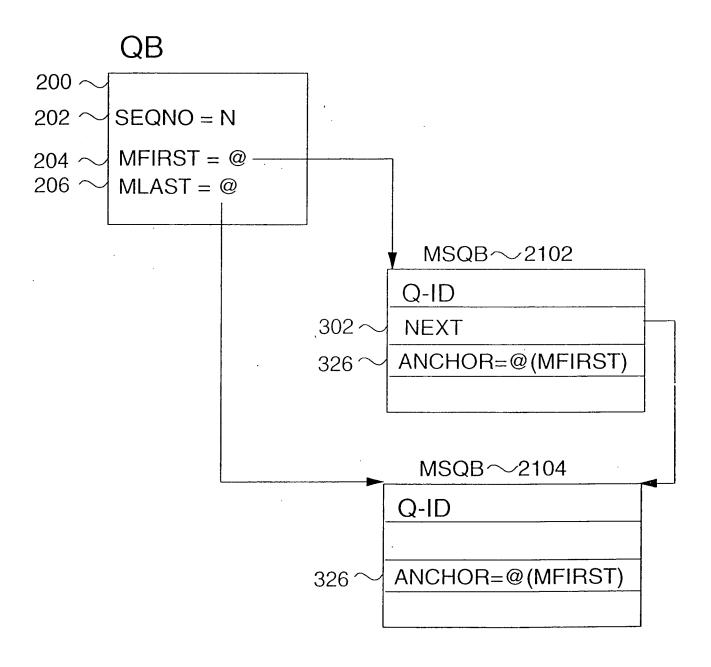


Fig 21A

#### PLO UNCHAIN LAST ELEMENT - AFTER

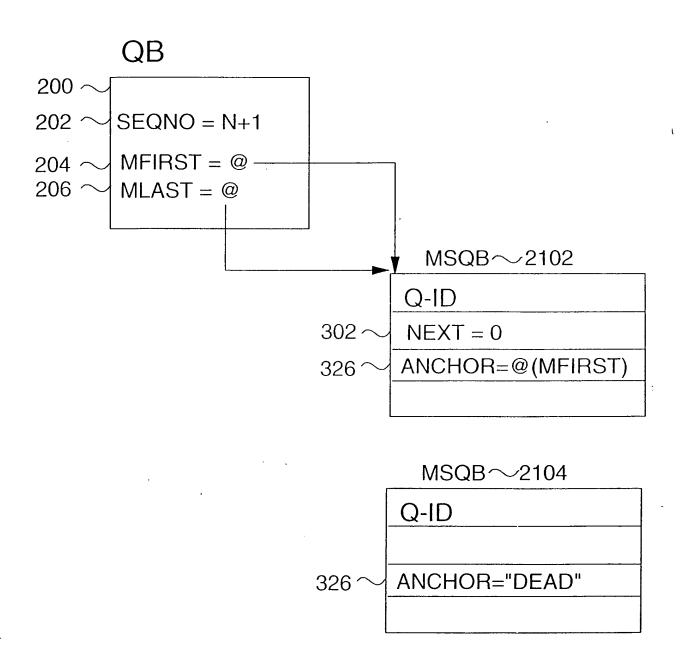


Fig 21B

#### PLO UNCHAIN MIDDLE ELEMENT - BEFORE

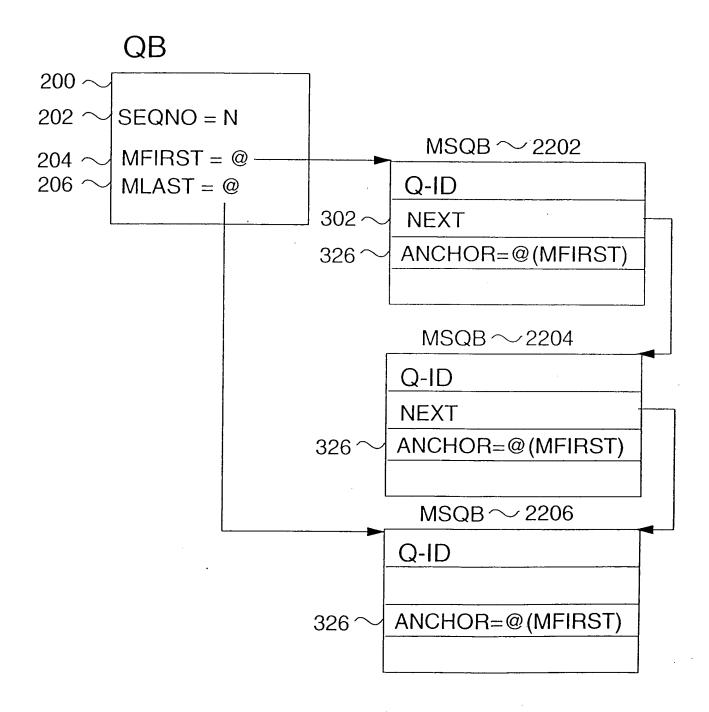


Fig 22A

#### PLO UNCHAIN MIDDLE ELEMENT - AFTER

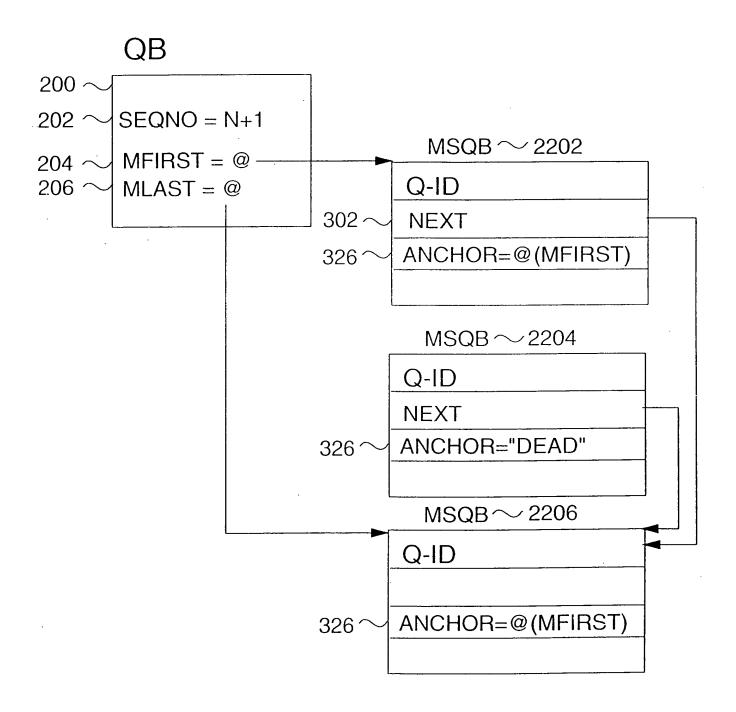


Fig 22B

### PLO CHAIN DEAD ELEMENT - BEFORE

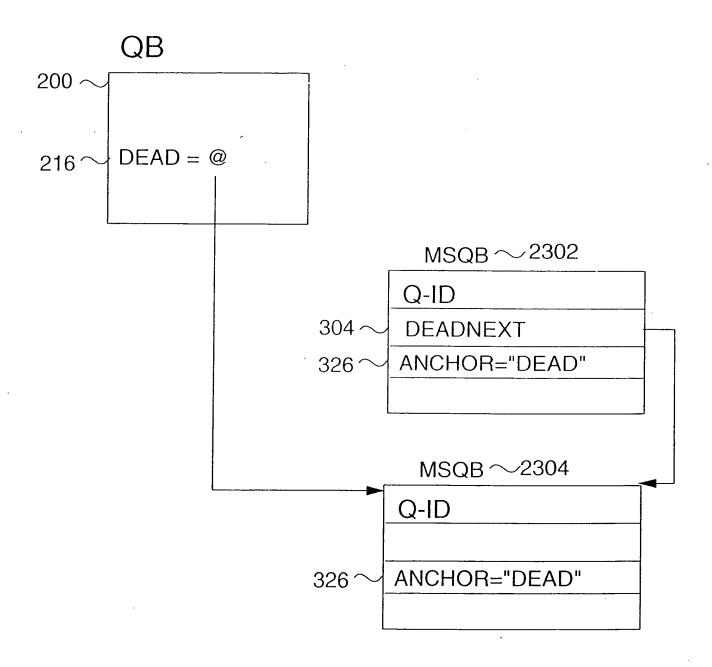


Fig 23A

## PLO CHAIN DEAD ELEMENT - AFTER

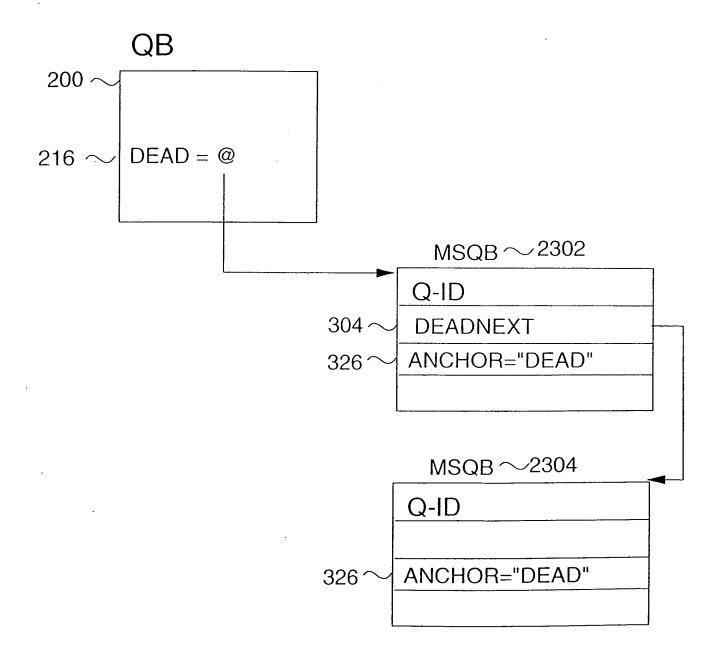


Fig 23B

### MESSAGE QUEUE RECEIVE RECOVERY

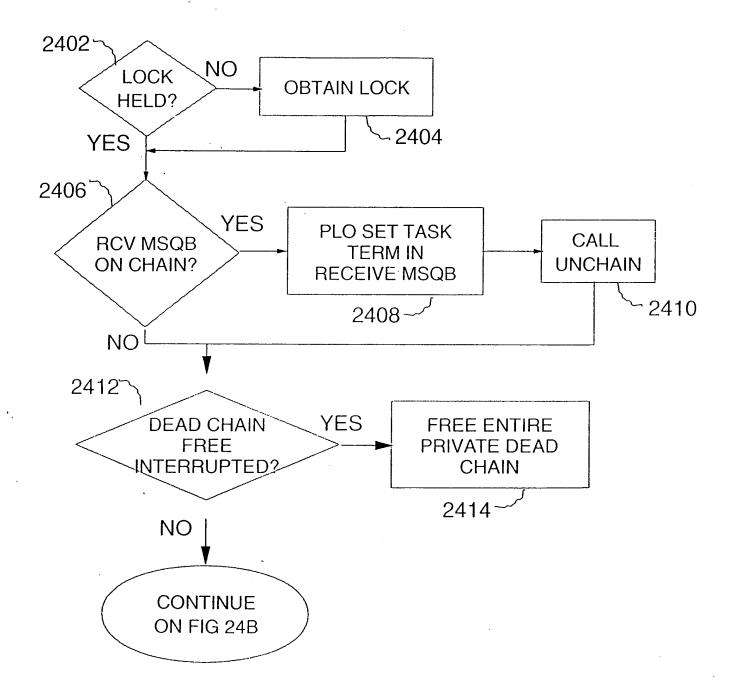


Fig 24A

#### MESSAGE QUEUE RECEIVE RECOVERY - CONT

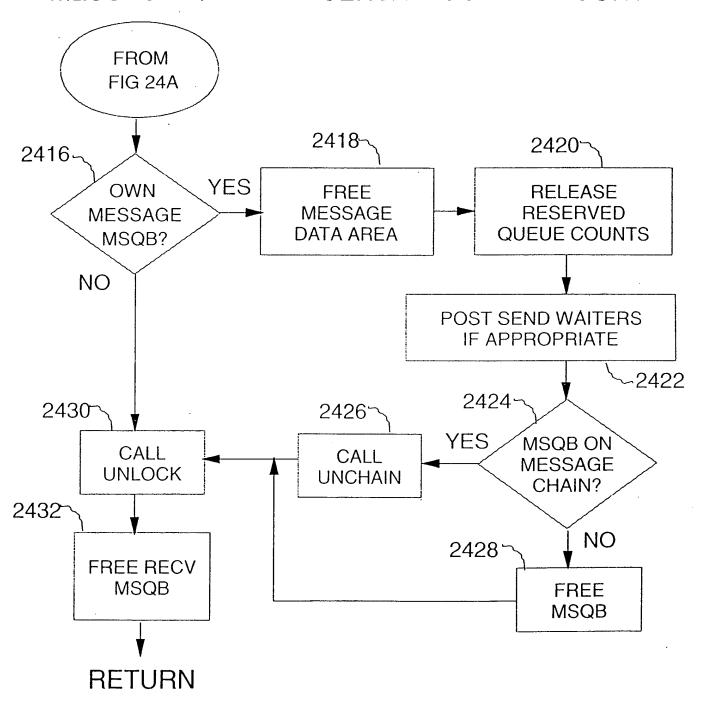


Fig 24B

### MESSAGE QUEUE SEND RECOVERY

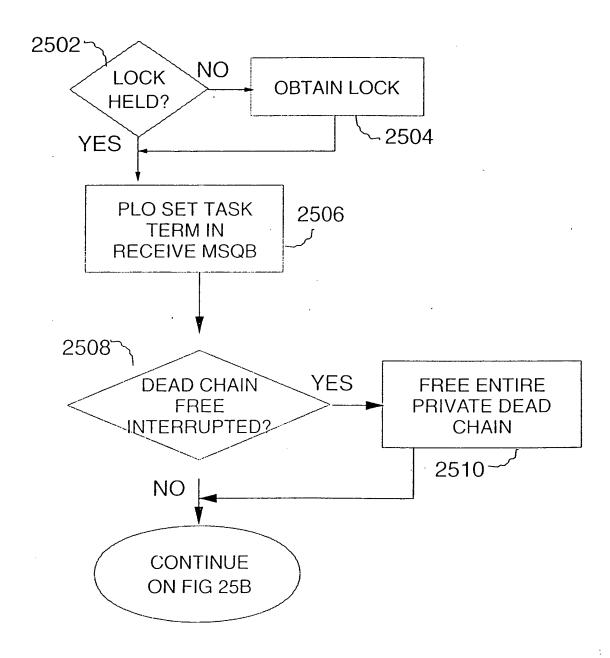


Fig 25A

## MESSAGE QUEUE SEND RECOVERY - CONT

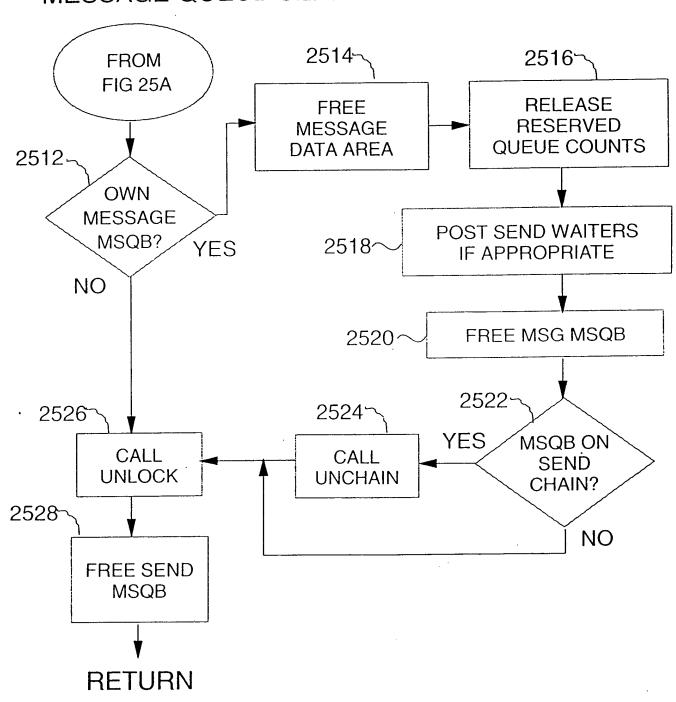


Fig 25B